

$n_1 = n_2 = 300$

H_0 : одна группа однородна

$H_1: H_0$

	A_2	A_3	A_4	A_5
1	33	43	80	144
2	39	35	72	154
Σ	72	78	152	198
P	$\frac{72}{600}$	$\frac{78}{600}$	$\frac{152}{600}$	$\frac{198}{600}$

$$\tilde{\Delta}_1 = \frac{(33 - 300 \cdot \frac{72}{600})^2}{300 \cdot \frac{72}{600}} +$$

$$+ \frac{(43 - 300 \cdot \frac{78}{600})^2}{300 \cdot \frac{78}{600}} + \frac{(80 - 300 \cdot \frac{152}{600})^2}{300 \cdot \frac{152}{600}}$$

$$\approx 0,25 + 0,41 + 0,21 \approx 0,87$$

$$\tilde{\Delta}_2 = \frac{(39 - 300 \cdot \frac{72}{600})^2}{300 \cdot \frac{72}{600}} + \frac{(35 - 300 \cdot \frac{78}{600})^2}{300 \cdot \frac{78}{600}} + \frac{(72 - 300 \cdot \frac{152}{600})^2}{300 \cdot \frac{152}{600}} \approx$$

$$\approx 0,25 + 0,41 + 0,21 \approx 0,87$$

$$\tilde{\Delta} = \tilde{\Delta}_1 + \tilde{\Delta}_2 = 1,74$$

$$\Delta \sim \chi^2 / ((4-1)(2-1)) = \chi^2(3)$$

$$p\text{-value} = P(\Delta > \tilde{\Delta} / H_0) = \int_{1,74}^{+\infty} p_{\chi^2(3)}(x) dx \approx 0,377 > 0,05$$

\Rightarrow (Нет оснований отвергнуть H_0)